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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/630,482

07/29/2003

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03462/LH

9669

1933 7590 04/03/2008

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EXAMINER

TRAN, NHAN T

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

04/03/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                           |  |
|------------------------------|--------------------------------------|-------------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/630,482 | <b>Applicant(s)</b><br>KUROSAWA, KAZUYUKI |  |
|                              | <b>Examiner</b><br>NHAN T. TRAN      | <b>Art Unit</b><br>2622                   |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11-18 and 21-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-18 and 21-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 11-18 and 21-29 have been considered but are moot in view of the new ground of rejection.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11, 14, 15, 18, 21 & 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Iijima Tatsuya (JP 2002-101331).

Regarding claim 11, Tatsuya discloses an image pickup apparatus (a digital camera shown in Figs. 1 & 7) comprising:

- an image pickup element (CCD 2) for picking up an image of an object;
- a shutter key (indicated by key section 11) for producing an operation signal when depressed (see Figs. 1 & 7; paragraph [0022]);
- a main control unit (CPU 9) for directly receiving the operation signal produced by operating the shutter key (Figs. 1 & 7), for sensing an initial change to an on state in the operation signal and providing an instruction to cause the image pickup element to

start to pick up the image of the object when the on state is sensed once (Fig. 4(a)), and for determining that the shutter key is released when an off state of the operation signal is sensed successively a predetermined number of times by sampling the operation signal at predetermined intervals of time (see Figs. 4(a), abstract and paragraphs [0023]-[0027], it is noted that when the shutter key is released, an off state of the operation signal is sensed successively a predetermined number of times after OFF as illustrated in Fig. 4(a) in order for the camera to maintain the off state of the shutter function properly as disclosed).

Regarding claim 14, Tatsuya also discloses an image processor (Figs. 1 & 7), responsive to the instruction given by the main control unit, for producing a drive timing signal to cause the image pickup element to start to pick up the image of the object (Fig. 4(a)), and for processing data on the image of the object picked up by the image pickup element (paragraphs [0020]-[0021]).

Regarding claims 15 & 18, these claims are also met by the analyses of claims 11 & 14, respectively.

Regarding claims 21 & 22, these claims are also met by the analysis of claim 11.

***Claim Rejections - 35 USC § 103***

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12, 13, 16, 17 and 23-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima Tatsuya (JP 2002-101331) in view of Hung (US 6,583,820).

Regarding claim 12, Tatsuya discloses the key section 11 that includes a plurality of keys, i.e., a shutter key and a mode change key, etc., wherein the mode change key generates a second operation signal (i.e., play mode signal) in response to depressing a key switch in the key section 11 at a predetermined intervals of time to thereby produce a sampled signal to the main control unit (CPU 9) (see paragraphs [0020]-[0022]).

Tatsuya does not explicitly teach a sub control unit for sampling the above second operation signal and for delivering information on the sampled signal to the main control unit.

However, as taught by Hung, an operation panel (130) of a digital camera can be directly connected to a main CPU (Fig. 2) and controlled by a main CPU (110) alone or it is also possible to arrange a sub-CPU to share the workload with the main CPU for sampling control signals input from the operation control panel (see Hung, col. 5, lines 8-11).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the digital camera in Tatsuya to provide a sub-CPU for sampling the second operation signal generated in response to depressing a key switch (i.e., a play mode switch) so that the workload on the main CPU would be shared by the sub-CPU as suggested by Hung above. Doing this would improve the camera's operation efficiency.

Regarding claim 13, this claim is also met by the analysis of claim 12, wherein the key switch (the play mode switch) is directly connected to the sub-CPU for delivering the sensed on state of the second operation to the main CPU.

Regarding claims 16 & 17, these claims are also met by the analysis of claim 12.

Regarding claims 23 & 29, these claims are also met by the analyses of claims 11 & 12.

Regarding claims 24-26, these claims are also met by the analysis of claim 11.

Regarding claims 27 & 28, these claims are also met by the analyses of claims 12 & 14.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NHAN T. TRAN whose telephone number is (571)272-7371. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nhan T. Tran/  
Primary Examiner, Art Unit 2622